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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.            | CONFIRMATION NO.       |
|---|-------------|----------------------|--------------------------------|------------------------|
| 10/590,990  | 08/29/2006  | Jae Hyung Ryu        | CU-5038 WWP                    | 2598.                  |
| 26530   | 7590        | 01/09/2008           |                                |                        |
| LADAS & PARRY LLP<br>224 SOUTH MICHIGAN AVENUE<br>SUITE 1600<br>CHICAGO, IL 60604 |             |                      | EXAMINER<br>HUNNINGS, TRAVIS R |                        |
|   |             |                      | ART UNIT<br>2612               | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>01/09/2008        | DELIVERY MODE<br>PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/590,990

**Applicant(s)**

RYU, JAE HYUNG

**Examiner**

Travis R. Hunnings

**Art Unit**

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shorrock et al. (Shorrock; US Patent 6,283,065) in view of Berthon (US Patent 5,864,323).

Regarding claim 1, Shorrock discloses *Animal Collar And Stud Assembly That Promotes Animal Safety And Well Being* that has the following claimed limitations:

The claimed eyelet washer is met by the base 36 as seen in figures 3 and 4;

The claimed eyelet base including a rim disposed against the eyelet washer with an object therebetween and a barrel formed in a single body with the rim, passing through the object and fixed to a washer hole formed in the eyelet washer is met by the cap 32 as seen in figures 3 and 4.

Shorrock does not specifically disclose the claimed eyelet washer and eyelet base being formed of a nonconductive material. However, it would have been obvious to one of ordinary skill in the art that the stud could be made out of any desirable material including nonconductive plastics because of their well known durability and relative inexpensiveness.

Shorrock still does not specifically disclose the claimed RFID module interposed between the eyelet washer and the eyelet base with the object. Berthon discloses *Ring Antennas For Resonant Circuits* that teaches an enclosed transponder device similar in structure to Shorrock wherein the transponder and antenna is wrapped around a cylindrical shape as seen in figures 8a, 8b, 9a and 9b (column 4, lines 31-52). Shorrock discloses a transponder stored in the barrel portion of the cap (column 8, lines 53-67) and modifying the device to place the transponder in a circular arrangement around the barrel portion as taught by Berthon would allow the antenna to be formed in a ring arrangement which would provide alternatives to the device originally disclosed and therefore make it more desirable. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Shorrock according to the teachings of Berthon to store the transponder (RFID module) around the barrel (interposed between the eyelet washer and the eyelet base).

Regarding claim 2, the claimed module comprising an RFID substrate including a passage hole in response to the barrel, an antenna formed around the passage hole on the RFID substrate and an RFID circuit formed on the RFID substrate connected to the antenna is met by the transponder and antenna being disposed around the cylindrical shape (barrel) as seen in figures 8a, 8b, 9a and 9b of Berthon (Berthon: column 4, lines 31-52).

Regarding claim 3, the claimed module comprises an outer line formed equivalent or smaller than one of the passage hole in response to the barrel, the adjacent eyelet washer and the rim of the eyelet base is met by the transponder and antenna being disposed around the cylindrical shape (barrel) as seen in figures 8a, 8b, 9a and 9b of Berthon (Berthon: column 4, lines 31-52).

Regarding claim 4, the claimed external flange is formed around the outside of one of the eyelet base and eyelet washer adjacent to the RFID module and a space for disposing the RFID module between the object and the eyelet for RFID is formed by the external flange is met by the external wall as seen in figures 8a, 8b, 9a and 9b of Berthon.

Regarding claim 5, the claimed internal flange is formed around the circumference of the washer hole of the eyelet washer adjacent to the RFID module and a space for disposing the RFID module between the object and the eyelet for RFID is formed by the internal flange is met by the internal wall 83, 87 in figure 8a and 93, 97 in figure 9a.

Regarding claim 6, the claimed slanted projection is formed on the outside of the barrel, a locker is formed adjacent to the washer hole in the eyelet washer in response to the slanted projection and the eyelet base and the eyelet washer are fixed to the

object by the engagement of the slanted projection and the locker is met by the threaded interaction between the base and cap as seen in figures 3 and 4 of Shorrock.

Regarding claim 9, Shorrock and Berthon do not specifically disclose the claimed nonconductive material being synthetic resin however it would have been obvious to use any desired well known material to construct the stud, including synthetic resin.

#### ***Allowable Subject Matter***

3. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lin, *Decorative Button For A Pet Collar*, USP 5,367,987;

Claessens et al. *Apparatus For Electronically Verifying The Authenticity Of Contents Within A Container*, USP 7,061,382;

Lerch et al. *Identification Band Using A Conductive Fastening For Enhanced Security And Functionality*, US PGPUB 2007/0120687.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TRH

  
BENJAMIN C. LEE  
PRIMARY EXAMINER